Two types of neuter: Second-conjunct agreement in the presence of ‘5 and ups’
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Introduction: First conjunct agreement is a common phenomenon in natural languages, found in cases when the subject follows the verb and in which the verb agrees with the closest conjunct. Extant analyses, e.g. Citko 2004, makes reference to the structure of ConjP, in which the first conjunct occupies the specifier and the second the complement position, making the first conjunct accessible for agreement with the verb and the second conjunct too far away. Such an analysis predicts that one should not find second conjunct agreement even when the subject is preverbal. Although much less common, second conjunct agreement with preverbal subjects exists in Slovenian, Serbo-Croatian, and Ndebele (Moosally 1994, Marušič, Nevins & Saksida 2007 [MNS], Bošković 2008 etc.), as in (1/2).

According to MNS, Last conjunct agreement (LastCA) arises because only number can be computed at the level of the entire coordination (call this Computation-by-ConjP). Unlike for number, there's no way to say what is the gender of the entire coordinated subject. Therefore the verb must search for gender separately (through a second instance of Agree) within the ConjP, and when doing so it may resort to the precedence relation rather than to dominance. Under this implementation, there can be no bona fide last conjunct agreement (i.e. resulting in agreement with the furthest conjunct when the conjunction is postverbal), a fact experimentally confirmed in Marušič, Nevins and Badecker 2008. Rather, last conjunct agreement in preverbal conjuncts is the result of a linearly-computed closest-conjunct agreement within the ConjP projection.

Numerals 5 & up: However, many Slavic languages exhibit a further complication in the noun phrases. Noun phrases with numerals higher than 5 (henceforth 5&Ups) require the noun to be in the genitive plural. In Slovenian, such noun phrases always trigger neuter singular agreement on the verb, (3)-(4). Surprisingly, even when such noun phrases are conjoined, the agreement must remain singular, (5) (this fact reported in Franks 1994). This is entirely unexpected when comparing such structures to other conjoined singular noun phrases, which without exception trigger dual or plural agreement, (6). In other words, the neuter singular of a true neuter noun such as teleta 'calf' does not interact in a conjunct in the same way as the default neuter singular of 5&Ups. This calls for a distinction between inherent neuter (specified on a noun such as teleta) and neuter as the result of lack of gender on the head of NP, as in 5&Ups, as discussed below.

5&Ups inside conjunctions: Most interestingly, combining a 5&Up with a regular plural noun phrase yields the following pattern. When the closer conjunct is a regular plural nominal, agreement is plural (in the gender of the closest nominal). When the closer nominal phrase is 5&Up, agreement is singular, (7)-(8). Plural agreement is impossible if the closest noun phrase is 5&Up, (9). The novel empirical finding is the following: whenever there is a 5&Up in the conjunct, agreement is always with the Last Conjunct.

Not clausal conjunction: These cases could potentially be analyzed with clausal conjunction (Aoun, Benmamoun, and Sportiche 1994), but examples such as (10) and (11) argue against such an analysis. If this were a case of clausal conjunction where each clause would have parts of the subject, it should not be possible to interpret the adverb ‘together’ referring to the entire coordinated subject, (10), and the coordinated subject should not be capable of controlling the subject of the embedded non-finite clause, which is again interpreted as the entire coordinated subject.

Proposal: Our proposal is that Slovenian 5&Ups lack a D layer (see Pereltsvaig 2006 on Russian nonagreeing 'small nominals'). Crucially, we claim that ConjP's computation of its number (and by extension, all agreement) requires a D layer on its arguments. In the absence of a D layer on either of ConjP's daughters, Number Computation-by-Conj fails, and the mechanism of Linear Conjunct Agreement becomes the only grammatical option, for gender as well as number. The ordinary 'last resort' of masculine agreement -- typically possible as an option in examples such as (1) and (2) -- is unavailable in examples like (7), as shown in (12). While masculine is available if number computation-by-Conj succeeds and only gender is needed, in (7)-(9), gender is not the only unvalued feature, and as there is no default value for number, the only grammatical option is full agreement with the closest conjunct, even when one of the two conjuncts is masculine. 5&Ups, lacking a D layer, bear no phi-features at all, and when they are the closest conjunct, the maximally unmarked number and gender features of neuter singular are inserted by morphological default. This finding is consistent with the account of Number Computation-by-Conj of MNS; when this mechanism fails, both number & gender seek the closest conjunct.
(1) [Krave in teleta ] so odšla / *odšle na pašo. from MNS [cowF.PL and calfN.PL ] aux wentN.PL wentF.PL on grazing 'Cows and calves went grazing'

(2) [ Teleta in krave ] so odšla / *odšle na pašo. from MNS [calfN.PL and cowF.PL ] aux wentF.PL wentN.PL on grazing 'Calves and cows went grazing'

(3) a. (Tistih) 10 fantov je brcalo žogo po igrišču. those 10 boys.genPL AUX.SG kicked.NeutSG ball around playground
b. (Tistih) 6 deklic je nabralo rožice po travniku. those 6 girls.genPL AUX.SG picked.NeutSG flowers around meadow

(4) a. *Tistih 10 fantov so brcalo žogo po igrišču. those 10 boys.genPL AUX.PL kicked.MascPL ball around playground
b. *Tistih 6 deklic so nabirale rožice po travniku. Those 6 girls.genPL AUX.PL picked.FemPL flowers around meadow

(5) a. Šest fantov in šest deklet je brcalo žogo po igrišču. 6 boys.genPL and 6 girls.genPL AUX.SG kicked.NeutSG ball around playground
b. *Šest fantov in šest deklet so brcali žogo po igrišču. 6 boys.genPL and 6 girls.genPL AUX.PL kicked.MascPL ball around playground.

(6) Fant in dekle sta brcala / *je brcalo / *brcala žogo. 'A boy and a girl were kicking a ball.'

(7) a. Pet stanovanj in vse hiše so se prodala zelo poceni. 5 flats.genPL and all houses.Fem AUX.PL refl sold.FemPL very cheaply
b. Zelo poceni so se prodala vsa stanovanja in pet hiš. very cheaply AUX.PL refl sold.NeutPL all apartments.Neut and 5 houses.genPL

(8) a. Vse hiše in pet stanovanj se je prodalo zelo poceni. all houses.F and 5 apartments.genPL refl AUX.SG sold.NeutSG very cheaply
b. Zelo poceni se je prodalo pet hiš in vsa stanovanja. very cheaply refl AUX.SG sold.NeutSG 5 houses.genPL and all apartments.Neut

(9) *Vse hiše in pet stanovanj so se prodali zelo poceni. all houses.F and 5 apartments.genPL AUX.PL refl sold.MascPL very cheaply

(10) a. 5 koz in vse krave so se pasle skupaj. 5 goats.genPL and all cows.F AUX.PL refl grazed.FemPL together
b. vse krave in 5 koz se je paslo skupaj. all cows.F and 5 goatsF.genPL refl AUX.SG grazed.NeutSG together
   »All cows and 5 goats grazed together.«

(11) a. Vse tajnice in vseh osem čistilk se je odločilo srečati se. all secretaries and all eight janitors refl aux.sg decided.neutSG meet.inf refl
b. Vseh osem čistilk v vse tajnice so se odločile srečati se. all eight janitors and all secretaries aux.pl refl decided.neutpl meet.inf refl
   »All secretaries and all eight janitors decided to meet.«

(12) a. *Pet stanovanj in vse hiše so se prodali zelo poceni. 5 flats.genPL and all houses.Fem AUX.PL refl sold.MascPL very cheaply
b. *Pet zemljevidov in vse hiše so ležali na mizi. 5 maps.MgenPL and all houses.Fem AUX.PL laid.MascPL on table


Bošković, Ž. 2008. Unifying first and last conjunct agreement. Ms., University of Connecticut